

(1) Number of pages _____

(2) Date of repair _____

(3) Initials of the Referencer _____

MADRAS RECORD OFFICE

Government of Madras

Public Works DEPARTMENT

G.O. No.	1172	Press
B.P. No.		Mis.
Dated	27-4-	68 75
		195

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
27th April 1875.*

Read the following papers:—

- No. 649. From District Engineer, Malabar, dated 22nd August 1874, No. 111.
No. 650. From do. do. „ 10th March 1875, „ 229.
No. 651. From W. S. HARINGTON, Esq., District Engineer, Malabar, to Colonel G. W. WALKER, R.E., Chief Engineer, Public Works Department, dated Calicut, 26th March 1875, No. 241.

With reference to your memorandum, No. 291, dated 12th instant, I have the honor to forward a section of the site for the connecting link between the beach and the rocky islet at Beypore taken on the 22nd idem, as also a revised estimate amounting to Rupees 1,830.

2. I have also the honor to forward copy of a letter, No. 595, dated 24th instant, from the Supervisor in charge of the Calicut Range, affording all the information required in your memorandum under notice.

From Mr. J. LALOR, Supervisor, in charge of Calicut Range, to W. S. HARINGTON, Esq., District Engineer, Malabar, dated Calicut, 24th March 1875, No. 595.

As directed by the Chief Engineer in No. 291, dated 12th instant, to your address, I beg to submit a section of the site for sea wall from the rocky islet to the mainland at Beypore taken on the 22nd March, with the revised estimate called for.

2. I have carefully examined the bottom where scour has taken place, and the result of the borings is given on the section.

3. Owing to prevailing winds, the only season of the year that boats can come out of the river with stone is December; the stones were collected and kept at the quarry, but were not brought then as the line for the wall had not been finally decided on, owing to the silting up of the bank not having been completed. A few boat loads of stone were brought and stacked on the shore near high water mark, but these began to disappear under the sand, so it was thought advisable to leave the collection of materials at site until the sand bank had fully formed.

4. Under the orders conveyed in your memorandum, No. 456, dated 17th February 1875, the sea wall has been commenced and 450 feet carried out; there only remains the deep part to be filled with stone, which is now in progress. The grant of Rupees 900 for the current official year will be utilized, and the balance, viz., Rupees 930, of the estimate will be required in April, as I think it will be advisable to complete the work.

No. 652. ORDER THEREON, 27th April 1875, No. 1,172.

CIVIL WORKS, No. 37A.

It appears that owing to the action of the sea the minimum amount of stone to be deposited has been increased from 540 to 895 cubic yards, while it is stated to be impossible to carry out the work at a less cost than Rupees $1\frac{3}{4}$ per cubic yard. This, with nearly 10 per cent. for contingencies, but disallowing the item of Rupees 100 for pegging and staking the stones, which is useless, make a total for the revised estimate of Rupees 1,600, which is sanctioned, and the unprovided balance of Rupees 700 allotted from the Reserve.

2. Considering that the port of Beypore is used by boats for the landing and shipping of cargo for many months of the year, it is not understood why boats can only

Proceedings of the Madras Government, Public Works Department,
27th April 1875.

come out of the river with stones in December. The work seems to have been unnecessarily delayed, and not to have been carefully directed by the District Engineer, who has left the Range Officer very much to himself as to the time and manner of its execution. His Excellency the Governor in Council expects that the District Engineer will interest himself more personally in it, and do more to bring it to a successful conclusion. It should have been fully instead of only one-third completed at the end of the official year. It is very doubtful whether either the Range Officer or District Engineer have fully appreciated the proportion of work remaining to be done. They have failed to answer the Chief Engineer's call for report of the quantity of material collected.

(True Extract.)

(Signed) G. W. WALKER, Colonel, R.E.,
Secretary to Government.



Malabar Dist. Engineer's Office
Calicut August 1875

From The District Engineer,
Malabar.

To The Chief Engineer,
P. W. Department
Madras.

Sir,

Adverting to your Memo. No. 283 dated 21st April last on Lieut. Colonel Farewell's No. 28-9 to your address dated 11th Idem, I have the honor to request your attention to the accompanying longitudinal section of the gap between the mainland and rocky Islet at Bepore - it was taken by Mr. Lalor in my presence on the 18th Instant, so that I can vouch for its correctness. On comparing this section with that forwarded with Lieut. Colonel Farewell's letter above noticed, and which is again forwarded for your inspection, you will observe that the bed of sand which existed in December 1873 has been completely scoured out during the floods.

floods and freshes of this last monsoon
to an average depth of three feet, render-
-ing it necessary to carry out the
section G. H. K. (marked on the cross
section delineated below the longitu-
-dinal one) instead of the smaller one
G. F. D. ordered by you to be first
carried out - had it been possible to
do this latter before the monsoon
the effect of it probably would have
been to bank up the channel across
instead of its being scoured out as
explained. However in my Lt. 81
dated 9th ultimo it was found im-
-possible to do any thing during
the monsoon and the work can
only now be commenced. Under
the circumstances represented I
request your sanction for carrying
it out according to the section G. H. K.
(which is in fact the same as that
marked B. E. D. in the cross section
delineated in your Memo. already
referred to) at a cost of Rs. 2500.

The boatmen are still contending
against the rate of Rs. 1½ per cubic yard
but I hope within the next few days
to render them amenable.

I have the honor to be
Sir,

③
Your most obedt. servant.

W. Harrington

District Engineer, Malabar

0-3-0
0-4-0

100

1000

The West Indians

W. A. R. R.

8-5294

His family includes

1894

with address

dated 22.3.

245

August 7/94

+ Ret'd to the Dr. Surp.

with 2010 34612

July 2, 1891

100-110371-551105

28. Dec. 11/12. 4/55. 1/11.

was Sept. 1878

between the books 911

and the Stone at 1300 ft.

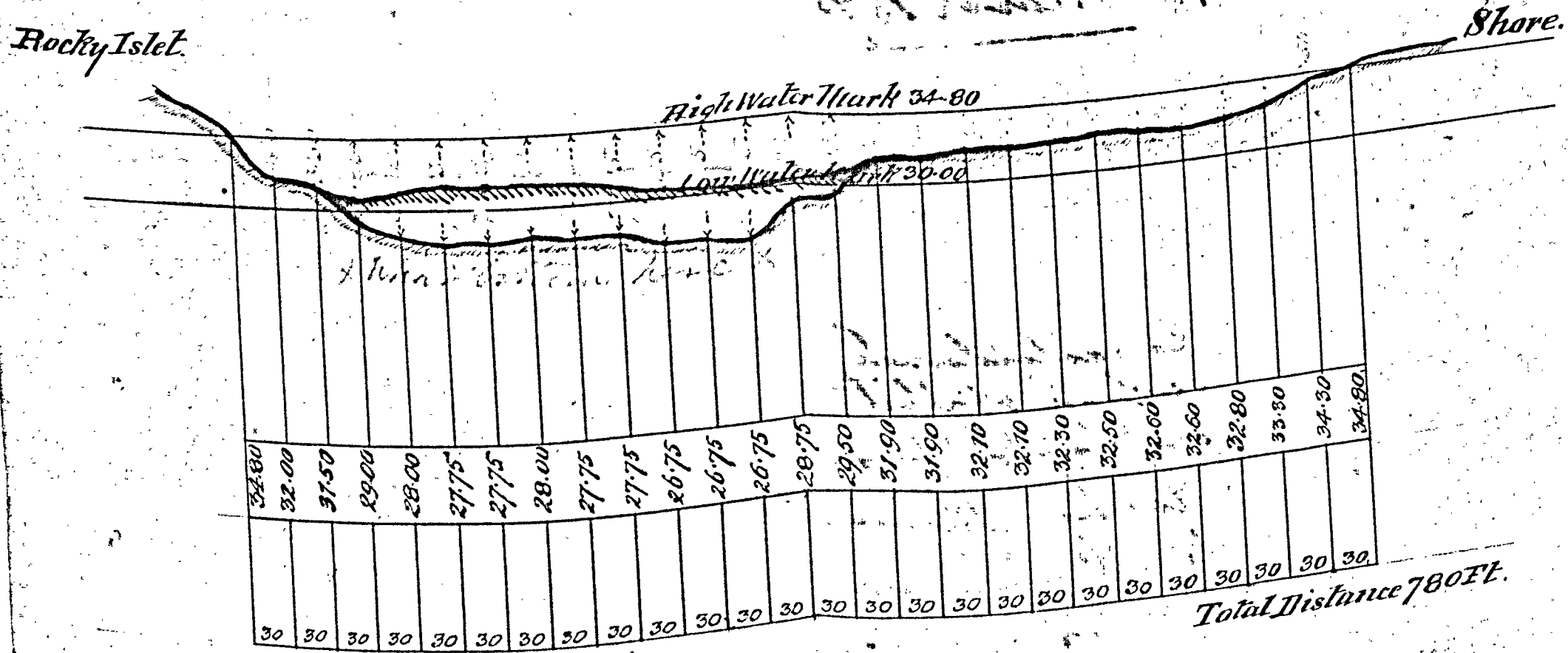
and Solidity Structures for

Young and the world

according to a section
through the

e-21-4175
Hofstadter

Longitudinal Section of Spit of Sand from Rocky Island to Mainland at Beypore.
Taken 3rd Feby. 1875.



Datum 30 Feet below Low Water.

W. Harrington
District Engineer Malabar,
Calicut 12th March 1875
Major Calicut Range Office.
Calicut 12th February 1875.

Horizontal Scale 100 Ft = 1 inch.
Vertical Scale 10 Ft = 1 inch.

Chaoth Supervisor D.P.W.
In Charge Calicut Range.

Note.

The shaded line above L.W. mark is the level of sand bank taken in January 1875.
The lower line shows the sand which has taken place between 29th Jan'y + 8th Feby. 75. ll.

In a letter from
the Distt. Engr
Malabar to the
Secretary to Govt.
D.D. No. 209 of
10 March 1875

Longitudinal
section of spit
of sand from
Rocky Island
to Muziris
at Mysore.

11/1854/25
4/25

4.6.24.6.75-11/72

Data for building 1 cubic yard sea wall with Laterite
boulders.

Description	Per	Rate
Cost of quarrying Boulders Laterite	eye	" 8 "
Leading charge from quarry to boat	"	" 2 "
Loading and unloading (charges) the boat	"	" 4 "
Boat hire from near Mr. Reid's works to Railway Station gate 3 miles	" 6 "	} Boat hire - 0-3-0 Labor - 1-4-0
Loading and unloading in carts and conveying from Railway Station gate to site with leading charge nearly 1/2 mile	" 5 "	
Constructing the wall	" 3 "	
Total		1 12 "

No. II or Calicut Range office
Calicut 12th February 1875

Signed J. Labor Supervisor
In charge Calicut Range.

(True Copy)

W. H. Harrison
Dist. Engr. Malabar.

1000
 2/25
 1854

1854-12-1

Order for land
 my cable cables
 of the
 small with the
 side - 180000

the district of
 Malabar to the
 Seafaring before
 10th March 1875

1875-12-1

Provincial Estimate for connecting the Rocky Islet with the mainland at
 Berpoor.

Connecting the Rocky Islet with the mainland at Berpoor.

Measurements
 Length 30 1 1/2 " 67 1/2
 Breadth 60 4 4 " 1960
 Depth 300 7 7 " 14700
 60 6 16 " 2160 one foot allowed for lining shore
 330 3 3 " 2970
 Total 2085 7 1/2 Cub. ft or 772 1/2 cu yds of latente
 public Sea wall - 12 " 4 d 1351 1/4 "

Particulars Rate per Article Work. Amount

Sundries & superintendence @ 10 percent 1482
 Total Amount of Estimate Rs 1500

Not of a latent Range Office
 Latent 5th March 1875
 calculated 10th March 1875

Sherrington District Engineer, Malabar.

Chaoor Incharge Latent Range.

To Messrs the Rev
 Chief Engineer
 By whom
 By whom

Specification to accompany
Estimate for connecting the Rock
Islet with the mainland at Neyoor.

Amount of Estimate Rs 1500/-

On the line marked out a
row of the largest laterite stones pro-
curable (from 1 to 12 ft cubes) should
be deposited in a triangular section
not above High Water Mark, the
length of the base of the triangle to be
double the perpendicular height well
packed so as to form a nucleus on
which sand may accumulate.

Chao Supervisor of
the Calicut Range

N. D. Malicut Range Office
Calicut 5th March 1875

Malabar District Office
Calicut 10th March 1875

W. Harrison
District Engineer, Malabar.

N. 569

Calicut - 12th February 1875

From

The Supervisor In charge
Valiant Range.

Jan 21

The District Engineer
Malabar

Sir

With reference to your Memoir
#113 dated 27th January 1875. I beg to submit
for your consideration and orders a Longitudinal
Section of the spit of sand from the Rocky Solit
to Hamland Bay from taken on 3rd Instant.
The work of Sea wall was commenced on the
20th January and 60 feet carried out. It went
very windy and Sea very rough on the 29th when
blowing from South West and the portion of
Spit nearest the Rocky Solit has gradually
been washed away and appears to be shifted
to the opposite side. I took soundings on the
3rd Instant and have been waiting since to see
if after the winds ceased and the Sea became
calm whether the silting process would again
begin but this is not the case the wash of
the sand is still going on and does not look
as if it would fill up again. the gap is becoming
wider

Heed with you
 Monday - to the

Secretary, Boston
 Oct. 8. - Mr. Williams
 No. 229 State St.
 March 1895

St. Louis, Mo.
St. Louis, Mo.

Dated 5th } March
 Received } 1875

Colombia must
be considered in
connecting the
Andes belt
with the Moun-
tains at Mexico

Estimate of Specifi-
cation for Construct-
ing the Hoyle
Waterworks the above
land at Hoyle.

100/652/95

Shut. Post. No 1580.

widen every day. I have therefore to request that you will be good enough to allow me to revise the Estimate for this work and to allow for filling with stone the deep parts. The 60 feet wall already built on the sand is gradually being undermined and washed away. Under these circumstances I have stopped building the wall, but the collection of the Laterite rubble is going on.

2. I take this opportunity to append Data of the actual cost of a Cubic yard of stone wall and request that the rate Rs 1-12-0 may be allowed in the revised Estimate. The Boatmen refuse to bring stones in their boats out of the river into the sea; they say that their boats will be damaged and it does not pay them as they have to time their work with the tides.

3. The stone is now being brought in boats by the river from the quarry up to the Railway Station Gate and from thence in carts to the site.

I beg to be
(Signed) J. Lalor, Supervisor
In Charge Calicut Range
(Signed)
W. Harrington
S. E. of Calicut

In a letter from
the Dieth. Eng.
Malabar to the
Secy: to Govt.
P.O. D. N. 229 d/
10th March 1875

Copy of letter from
Calicut Range Office
to Dieth. Engineer
N. 569 d/12 Feb
1875: reporting
damages done
to the work of
connecting the
Rocky Islet with
the shore at
Byport -

M. 1654/75.
G.O. 27-6-75-11172

116/1652

N. 291- 12th March 1875

Letter from Malabar St Engineer, Esq.
229 of 10th March -

This subject should have
been referred for orders immediately if
the section was taken on 3rd February
as the reference was not made till
10th March, a much more recent sec-
tion might have been submitted - such
a section will be taken at once and
estimate corrected accordingly without
delay; the bottom where scour has
taken place being carefully exam-
ined at Low Water to ascertain
its nature, and if possible at what
depths Laterite Rock will be met
with.

Meanwhile collection of material
must not stop till the end of the month
at least; and report of the quantity col-
lected should be made. There is
surely some season of the year at
which boats can come out with their
cargoes of stone and discharge them

with
the where wanted without intervention
to of Carlo. The District Engineer
all should have ascertained what
the that season is, and arranged for
for execution of this year's work during
per that season. It has now apparently
the been lost.

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/ signed J. H. Walker J. R. E.
Chief Eng. D. O. to.

The District Engineer
Malabar



Malabar Dist. Eng's Office
Calicut 10th March 1875
No 229
From The District Engineer,
Malabar.

To The Secretary to Government,
Public Works Department,
Madras.

Sir, In G. O. No 173 dated 10th
June last a sum of Rs 900
was sanctioned for connecting
the Rocky Islet with the shore
at Kaypore. The work was
commenced on the 20th January
and further progress on it was
stopped by the Supervisor in
charge of the Calicut Range for
the reasons stated in his
letter (copy accompanying)
No 569 dated 12th ultimo para 1.
Another difficulty arose from
the impossibility of getting stone
for Rs 1 1/2 per Cyt. as explained
in para 2 of Mr. Lalor's letter
above quoted. I now submit
a revised estimate amounting
to Rs 1500 which provides for
every

every thing that is required
the rate per cubic yard
of Stone being raised to Rs 1-12-0
as per data appended. I request
that early sanction may
be accorded to the Estimate
so that the work may be
executed before the ensuing
monsoon.

I also forward for your
information a Longitudinal
Section of the Spit of sand
from the Rocky Islet to the
mainland taken on the
3rd Oct. I attribute the
Scour that has taken place
chiefly if not altogether to
the Southwest or along shore
winds which for weeks blow
with some violence for hours
at a time.

I have the honor to be
Sir,

Your most obedt. servant

W. Searington

District Engineer
Malabar

Q. No 173 of 16-June 73.
" 162 - 27-June 73.

By ^{from} 1875 Sept.
The Dist. Engineer,
Madras.
To The Secretary to
Government of
Madrass.

N. 229
Dated 10th March 75.
Recd 12th —

E. H. V.
No. 1172. 27-6-75
Forwarding Re-
vised Estimate
for connecting
the Rocky Hill
with the phone
at Periyar
for Rs. 1500 for
sanction

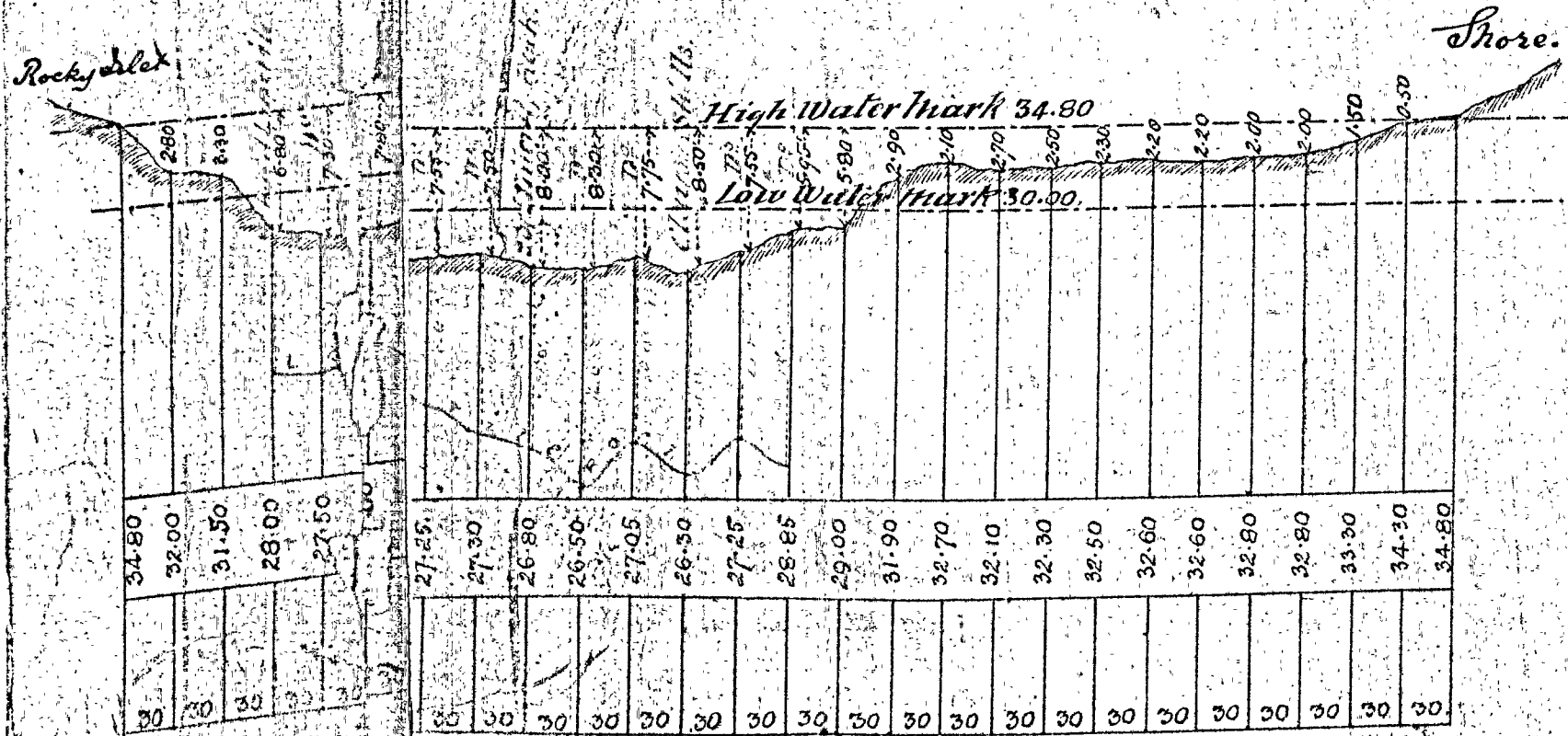
Memo No. 291-87
12th March 1875

1650

621-4-75 12-26-75

*Longitudinal Section of Spit of Sand from Rocky Islet to Mainland
at Beijpoor.*

Taken 22nd March 1875.



Datum 30 Feet above Low Water.

Total Distance 780 Feet.

*Herbert Cullin, Range Office
Calicut 24th March 1875.*

*Water Board Engineer
Calicut 26th March 1875.*

*Chaoth Supervisor DPW.
In Charge Calicut Range.*

*W. Harrington
Assistant Engineer*

In a letter from
the Distt. Engr.
Malabar to the
Chief Engineer
Por. & Madras
N^o 241 dated 26
March 1875

146 D
Longitudinal
Section of Spit
of land from
Rocky Islet to
the Mainland
at Beyprood
taken on the 22
March 1875-

O. R. 2044/75

N^o 595

N^o 11 or Calicut Range Office
Calicut 24 March 1875.

From The Supervisor, in charge of
Calicut Range.

To The District Engineer
Malabar

Sir, As directed by the Chief Engineer
in N^o 291 of 12th Instant to your address I
beg to submit a section of the spit for beach
wall from the Rocky Islet to the Mainland
at Beyprood taken on the 22nd March, with
the revised estimate called for.

I have carefully examined the
bottom where scour has taken place &
the result of the borings is given on the section.
The only season of the year that
boats can come out of the river with stone
is December, the stones were collected & kept
at the quarry but were not brought there as
the line for the wall had not been finally
decided on, owing to the silting up of the
banks not having been completed. A few
boat loads of stone were brought & stacked
on the shore near High water mark, but these
began to disappear under the sand so
it was thought advisable to leave the
collection of materials at site until the
sand

sand bank had fully formed.

4. Under the orders conveyed in your Memo No 456 of 17 February 1875, the sea wall has been commenced and 450 feet carried out, there only remains the deep part to be filled with stone, which is now in progress. The grant of Rs. 900 for the current official year will be utilised. and the balance of Rs. 530 of the Estimate will be required in April as I think it will be advisable to complete I have &c the work.

J. Lalor Supervisor
in charge, Calicut Range.

(True Copy)

W. Harrison

W. Engineer in Charge

The District

2163
1970
2603

Amount of Estimate Rs 1830-11-11

On the line marked out a
row of the largest laterite stones pro-
curable (from 1 to $1\frac{1}{2}$ ft cubes) should
be deposited in a triangular section
not above high water mark, the
length of the base of the triangle
to be double the perpendicular
height well packed, so as to
form a nucleus on which sand
may accumulate.

Chaco Supervisor O.R.W.
In charge Patient Range

N^o. II. Calicut Range Office
Calicut 24th March 1875

Pistina Eng. Malabar

No 241



Malabar Distt. Office
Calcutt 26th March 1875

From
The District Engineer,
Malabar.

To
The Chief Engineer,
Public Works Dept.
Madras.

Sir, With reference to
your Memo. No 291 dated
12th Instant, I have the
honour to forward a section
of the site for the con-
necting link between the
Beach and the Rocky
Islet at Paypoor taken
on the 22nd idem, as also
a revised estimate, am-
ounting to Rupees 1830.
I have also the
honour to forward copy
of a letter No 595 dated
24th

On a letter from
the Chief Engineer
Malabar to the
Chief Engineer 1875
No 1014 dated 23rd
March 1875

For about 1/2
Malabar District

Dated 24th March
Received 1875

Estimate for
connecting the
Rocky Islet
with the main-
land by a
causeway & a
pier.

No 2444/75

Estimate & spec-
ification for con-
necting the Rocky Is-
land with the mainland
at Paypoor.

24th 27th 1830

24th Instant from the Super-
-visor in charge of the
Calicut Range affording
all the information re-
-quired in your Memo:
under notice.

I have the honor to be,
Sir,

Your most Obedt Servant.

W. Harrington

Dist. Engineer,
Mildura.

[Faint, mostly illegible handwritten text, possibly bleed-through from the reverse side of the page.]

G.O. 1st Aug / 74 No 21-22
27th Oct / 73 - 162
Mis No 173 of 16th June / 74

Thos. N. 1875 Sept.
No 244
The District Magistrate
Malabar.

To
The Chief Eng.
Port &
Madras.
No 241

Dated 26th March
Read 29th 1875.

Enq. 3.
Forwarding Re-
vised Estimate
for Rs 1830 for
connecting the
Rocky Islet with
the shore at
Beyport -

G.O. No: 1172. 27/4/75.

No 657.

621-4-75

C. 19/10/50
P. 1/11/50

Proceedings of the Madras Court
Read the following
from the St. George's Malabar (H. E. No 111 of 22nd Aug / 74)
from the St. George's Malabar (H. E. No 239 of 10th March 1875)
Rintu - do do do do do do

G.O. no: 1172 of 27th April 1875
It appears that owing
to the action of the sea
the minimum amount of
stones deposited has
been increased from 540
to 895 cubic yards, while
it is stated to be impos-
sible to carry out the work
at a less cost than Rs 1⁰/₂
per cubic yard. This, with
nearly 10 per cent for
contingencies, but dis-
allowing the item of
Rs 100 for pegging and
staking the stones which
is useless, make a
total for the revised
estimate of Rs 1600, which

is sanctioned and the
unprovided balance
of Rs 400 allotted from
the Reserve.

Considering that the
Port of Beypoor is used
by Boats for the landing
and shipping of Cargo
for many months of the
year it is not understood
why boats can only come
out of the River with
stones in December.
The work seems to have
been unnecessarily delayed
and not to have been
^{carefully} intelligently directed by
the District Engineer who
has left the Range Officer
very much to himself as
to the time and manner of
its execution - His Excellency
the

the Governor in Council
expects that the District
Engineer will interest
himself more personally
in it, and do more to
bring it to a successful
conclusion. It should
have been fully instead
of only one third com-
pleted at the end of the
official year. It is very
doubtful whether either
the Range Officer or
District Engineer have
fully appreciated the
proportion of work
remaining to be done.
They have failed to answer
the Chief Engineer's call
for report of the quantity
of

of material collected.

lmm

MLB

2/11/75

MS: dispd only to the
Dr. Inc. - 27-4-75

72648-652

7 BDE Malabar
5 Cuth Wape

Recd 12-5-75

2/21-4-75

5294
1654
2044
Govt. of Madras.
PUBLIC WORKS.

To

The Dy. Super,
Malabar

Dated

Recd.

Encl.

G. O.

27th

1875

No.

1172

Nos 749-652

Rocky Islet - Revised Estimate
of Rs. 1,600 for connecting
— with the shore at Bayport
sanctioned, with the remark
that the work seems to have
been unnecessarily delayed.